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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,935	03/15/2004	Noboru Kuriyama	SAS2-PT071	1278

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EXAMINER	
MCDONALD, RODNEY GLENN	
ART UNIT	**PAPER NUMBER**
1795	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/800,935	KURIYAMA ET AL.	
	Examiner	Art Unit	
	Rodney G. McDonald	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-19 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-19 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 3/04, 9/06.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2, lines 9 and 10, is indefinite because "the first switch means" lacks antecedent basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kuriyama et al. (U.S. Pat. 6,113,760).

Regarding claim 1, Kuriyama et al. teach a sputtering power supply unit comprising a voltage generation section which generates sputtering voltage between a negative electrode output terminal and a positive electrode output terminal. (See Fig. 1 section A; Column 3 lines 29-33) A circuit section which reduces fluctuation in a sputtering current even if an arc discharge occurs between the negative electrode

output terminal and the positive electrode output terminal. (Column 4 lines 17-22; Figure 1 item B)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuriyama et al. (U.S. Pat. 6,113,760) in view of Kuriyama et al. (Japan 05-311418).

Kuriyama et al. '760 is discussed above and all is as applies above. (Se Kuriyama et al. discussed above)

Regarding claim 2, Kuriyama et al. '760 teach that voltage generation section comprises a sputtering DC power source (12). (See Fig. 1; Column 3 lines 29) A first switch section disposed on the negative electrode side of the sputtering DC power

source. (See Fig. 1 S1, Q1; Column 5 lines 4-9) A second switching section (S2, Q2) disposed in a middle position between a choke coil (L) and the first switch section (S1, Q1) and a reverse direction arc prevention circuit (D2 and R1). (See Fig. 1; Column 3 lines 59-60; Column 3 lines 44-45; Column 5 lines 45-49) A voltage detection section which detects a voltage generated between the negative electrode output terminal and the positive electrode output terminal. (Column 5 lines 15-23) A current detection section which detects a current flowing through the choke coils. (Column 5 lines 15-23)

The differences between Kuriyama et al. '760 and the present claims is that utilizing a plurality of mutually independent choke coils serially connected to the first switch means and a reverse-direction arc prevention circuit is not discussed (Claim 2),

Regarding claim 2, Kuriyama et al. '418 teach utilizing multiple inductances in series to prevent arc discharge. (See Abstract)

The motivation for utilizing plural inductances is that it allows for preventing arc discharge. (See Abstract)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kuriyama et al. '760 by utilizing the features of Kuriyama et al. '418 because it allows for preventing arc discharge.

Claims 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuriyama '760 in view of Kuriyama '418 as applied to claim 2 above, and further in view of Mark (U.S. Pat. 5,303,139).

The differences not yet discussed is the integration section, the amplifier section, the pulse width varying section, the means for stopping integration, a comparator section and driving section and an arithmetic circuit section. (Claims 3-7)

Regarding claims 3-7, Kuriyama '760 teach a control circuit with means for performing the claimed operations. (Column 5 lines 13-68; Column 6 lines 29-38) Mark suggest that the voltage and current can be determined by measuring via known analog amplifier circuits including adders, subtractors, integrators, differentiators, PI=PID controllers, etc. (Column 5 lines 3-8)

The motivation for utilizing the features of Mark is that it allows measurement of voltage and current. (Column 5 lines 3-8)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the features of Mark because it allows for measurement of voltage and current.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kuriyama et al. (U.S. Pat. 6,113,760) in view of Kuriyama et al. (Japan 2000-278950) and Kuriyama et al. (Japan 05-311418).

Kuriyama et al. '760 is discussed above and all is as applies above. (See Kuriyama et al. discussed above)

Kuriyama et al. '760 teach a reverse holding capacitor 15. (See Fig. 1) A second switching section (S2, Q2) disposed in a middle position between a choke coil (L) and the first switch section (S1, Q1) and a reverse direction arc prevention circuit (D2 and R1). (See Fig. 1; Column 3 lines 59-60; Column 3 lines 44-45; Column 5 lines

45-49) A voltage detection section which detects a voltage generated between the negative electrode output terminal and the positive electrode output terminal. (Column 5 lines 15-23) A current detection section which detects a current flowing through the choke coils. (Column 5 lines 15-23)

The differences between Kuriyama et al. '760 and the present claims is that a switching circuit which has a plurality of switching elements connected to bridges, and converts an output of the DC power source into a pulse output (Claim 8), a transformer which receives a primary pulsed voltage from the switching circuit, and outputs a secondary pulsed voltage (Claim 8), first and second diode bridges which rectify the secondary pulsed voltage output from the transformer (Claim 8), a plurality of mutually independent choke coils serially connected to an output side of the first diode bridge (Claim 8).

Regarding a switching circuit which has a plurality of switching elements connected to bridges, and converts an output of the DC power source into a pulse output , a transformer which receives a primary pulsed voltage from the switching circuit, and outputs a secondary pulsed voltage), first and second diode bridges which rectify the secondary pulsed voltage output from the transformer of claim 8, Kuriyama et al. '950 teach a DC power source which generates a predetermined voltage; a switching circuit which has a plurality of switching elements connected to bridges, and converts an output of the DC power source into a pulse output; a transformer which receives a primary pulsed voltage from the switching circuit, and outputs a secondary

pulsed voltage; first and second diode bridges which rectify the secondary pulsed voltage output from the transformer. (See Kuriyama '950 Abstract)

The motivation for utilizing the features of Kuriyama '950 is that it allows for providing the desired voltage. (See Abstract)

Kuriyama et al. '418 teach utilizing multiple inductances in series to prevent arc discharge. (See Abstract)

The motivation for utilizing plural inductances is that it allows for preventing arc discharge. (See Abstract)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kuriyama et al. '760 by utilizing the features of Kuriyama et al. '950 and Kuriyama et al. '418 because it allows for providing the desired voltage and for preventing arc discharge.

Claims 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuriyama et al. '760 in view of Kuriyama et al. '950 and Kuriyama et al. '418 as applied to claim 8 above, and further in view of Mark (U.S. Pat. 5,303,139).

The differences not yet discussed is the integration section, the amplifier section, the pulse width varying section, the means for stopping integration, a comparator section and driving section and an arithmetic circuit section. (Claims 9-15)

Regarding claims 9-15, Kuriyama '760 teach a control circuit with means for performing the claimed operations. (Column 5 lines 13-68; Column 6 lines 29-38) Mark suggest that the voltage and current can be determined by measuring via known analog

amplifier circuits including adders, subtractors, integrators, differentiators, PI=PID controllers, etc. (Column 5 lines 3-8)

The motivation for utilizing the features of Mark is that it allows measurement of voltage and current. (Column 5 lines 3-8)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the features of Mark because it allows for measurement of voltage and current.

Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuriyama et al. (U.S. Pat. 6,113,760) in view of Kuriyama et al. (Japan 2000-278950).

Kuriyama et al. '760 is discussed above and all is applies above. (See Kuriyama et al. '760)

Kuriayama et al. '760 teach a second switching section (S2, Q2) disposed in a middle position between a choke coil (L) and the first switch section (S1, Q1) and a reverse direction arc prevention circuit (D2 and R1). (See Fig. 1; Column 3 lines 59-60; Column 3 lines 44-45; Column 5 lines 45-49) A reverse voltage generation source. (Column 3 lines 59-60) A constant voltage element is connected in parallel to the switching section. (item 15; Fig. 1) A control section 11 which outputs a switching control signal to the switching element, and a switching control signal to control opening and closing of the switching section. (Column 5 lines 45-49) A voltage detection section which detects a voltage generated between the negative electrode output terminal and the positive electrode output terminal. (Column 5 lines 15-23) A current

detection section which detects a current flowing through the choke coils. (Column 5 lines 15-23)

Regarding claim 17, Kuriyama '760 teach a constant voltage element 15 and current detection means 14 connected in parallel to the switching section. (Fig. 1)

Regarding claim 18, the constant voltage element and current detection means are serially connected in parallel to the switching section, and the control section turns off the switching element when a current equal to/higher than a set current is detected by the current detection section, and outputs a switching control signal to the switching element when a zero current is detected by the current detection section. (Column 5 lines 13-65)

Regarding claim 19, Kuriyama '760 teach a constant voltage source as a constant voltage power source. (See Fig. 1 item 15)

The differences between Kuriyama et al. '760 and the present claims is that a switching circuit which has a plurality of switching elements connected to bridges, and converts an output of the DC power source into a pulse output (Claim 16), a transformer which receives a primary pulsed voltage from the switching circuit, and outputs a secondary pulsed voltage (Claim 16), first and second diode bridges which rectify the secondary pulsed voltage output from the transformer (Claim 16).

Regarding claim 16, Kuriyama et al. '950 teach a DC power source which generates a predetermined voltage; a switching circuit which has a plurality of switching elements connected to bridges, and converts an output of the DC power source into a pulse output; a transformer which receives a primary pulsed voltage from the switching

circuit, and outputs a secondary pulsed voltage; first and second diode bridges which rectify the secondary pulsed voltage output from the transformer. (See Kuriyama '950 Abstract)

The motivation for utilizing the features of Kuriyama '950 is that it allows for providing the desired voltage. (See Abstract)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kuriyama et al. '760 by utilizing the features of Kuriyama '950 because it allows for providing the desired voltage.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,113,760.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of U.S. Pat. No. '760 teach a voltage generation power supply and a circuit section that controls for constant current.

Claim 2 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,113,760 in view of Kuriyama et al. (Japan 05-311418).

Kuriyama et al. '760 is discussed above and all is as applies above. (Se Kuriyama et al. discussed above)

Regarding claim 2, Kuriyama et al. '760 teach that voltage generation section comprises a sputtering DC power source. A first switch section disposed on the negative electrode side of the sputtering DC power source. A second switching section (S2, Q2) disposed in a middle position between a choke coil (L) and the first switch section (S1, Q1) and a reverse direction arc prevention circuit (D2 and R1). A voltage detection section which detects a voltage generated between the negative electrode output terminal and the positive electrode output terminal. A current detection section which detects a current flowing through the choke coils.

The differences between Kuriyama et al. '760 and the present claims is that utilizing a plurality of mutually independent choke coils serially connected to the first switch means and a reverse-direction arc prevention circuit is not discussed (Claim 2),

Regarding claim 2, Kuriyama et al. '418 teach utilizing multiple inductances in series to prevent arc discharge. (See Abstract)

The motivation for utilizing plural inductances is that it allows for preventing arc discharge. (See Abstract)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kuriyama et al. '760 by utilizing the features of Kuriyama et al. '418 because it allows for preventing arc discharge.

Claims 3-7 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,113,760 in view of Kuriyama et al. (Japan 05-311418), and further in view of Mark (U.S. Pat. 5,303,139).

The differences not yet discussed is the integration section, the amplifier section, the pulse width varying section, the means for stopping integration, a comparator section and driving section and an arithmetic circuit section. (Claims 3-7)

Regarding claims 3-7, Kuriyama '760 teach a control circuit with means for performing the claimed operations. Mark suggest that the voltage and current can be determined by measuring via known analog amplifier circuits including adders, subtractors, integrators, differentiators, PI=PID controllers, etc. (Column 5 lines 3-8)

The motivation for utilizing the features of Mark is that it allows measurement of voltage and current. (Column 5 lines 3-8)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the features of Mark because it allows for measurement of voltage and current.

Claim 8 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,113,760 in view of (Japan 2000-278950) and Kuriyama et al. (Japan 05-311418).

Kuriyama et al. '760 is discussed above and all is as applies above. (See Kuriyama et al. discussed above)

Kuriyama et al. '760 teach a reverse holding capacitor 15. (See Fig. 1) A second switching section (S2, Q2) disposed in a middle position between a choke coil (L) and the first switch section (S1, Q1) and a reverse direction arc prevention circuit (D2 and R1). A voltage detection section which detects a voltage generated between the negative electrode output terminal and the positive electrode output terminal. A current detection section which detects a current flowing through the choke coils.

The differences between Kuriyama et al. '760 and the present claims is that a switching circuit which has a plurality of switching elements connected to bridges, and converts an output of the DC power source into a pulse output (Claim 8), a transformer which receives a primary pulsed voltage from the switching circuit, and outputs a secondary pulsed voltage (Claim 8), first and second diode bridges which rectify the secondary pulsed voltage output from the transformer (Claim 8), a plurality of mutually independent choke coils serially connected to an output side of the first diode bridge (Claim 8).

Regarding a switching circuit which has a plurality of switching elements connected to bridges, and converts an output of the DC power source into a pulse output , a transformer which receives a primary pulsed voltage from the switching

circuit, and outputs a secondary pulsed voltage), first and second diode bridges which rectify the secondary pulsed voltage output from the transformer of claim 8, Kuriyama et al. '950 teach a DC power source which generates a predetermined voltage; a switching circuit which has a plurality of switching elements connected to bridges, and converts an output of the DC power source into a pulse output; a transformer which receives a primary pulsed voltage from the switching circuit, and outputs a secondary pulsed voltage; first and second diode bridges which rectify the secondary pulsed voltage output from the transformer. (See Kuriyama '950 Abstract)

The motivation for utilizing the features of Kuriyama '950 is that it allows for providing the desired voltage. (See Abstract)

Kuriyama et al. '418 teach utilizing multiple inductances in series to prevent arc discharge. (See Abstract)

The motivation for utilizing plural inductances is that it allows for preventing arc discharge. (See Abstract)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kuriyama et al. '760 by utilizing the features of Kuriyama et al. '950 and Kuriyama et al. '418 because it allows for providing the desired voltage and for preventing arc discharge.

Claim 9-15 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,113,760 in view Kuriyama et al. '950 and Kuriyama et al. '418 as applied to claim 8 above, and further in view of Mark (U.S. Pat. 5,303,139).

The differences not yet discussed is the integration section, the amplifier section, the pulse width varying section, the means for stopping integration, a comparator section and driving section and an arithmetic circuit section. (Claims 9-15)

Regarding claims 9-15, Kuriyama '760 teach a control circuit with means for performing the claimed operations. (Column 5 lines 13-68; Column 6 lines 29-38) Mark suggest that the voltage and current can be determined by measuring via known analog amplifier circuits including adders, subtractors, integrators, differentiators, PI=PID controllers, etc. (Column 5 lines 3-8)

The motivation for utilizing the features of Mark is that it allows measurement of voltage and current. (Column 5 lines 3-8)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the features of Mark because it allows for measurement of voltage and current.

Claims 16-19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 6,113,760 in view of Kuriyama et al. (Japan 2000-278950).

Kuriyama et al. '760 is discussed above and all is applies above. (See Kuriyama et al. '760)

Kuriayama et al. '760 teach a second switching section (S2, Q2) disposed in a middle position between a choke coil (L) and the first switch section (S1, Q1) and a reverse direction arc prevention circuit (D2 and R1). A reverse voltage generation source. A constant voltage element is connected in parallel to the switching section. A

control section 11 which outputs a switching control signal to the switching element, and a switching control signal to control opening and closing of the switching section. A voltage detection section which detects a voltage generated between the negative electrode output terminal and the positive electrode output terminal. A current detection section which detects a current flowing through the choke coils.

Regarding claim 17, Kuriyama '760 teach a constant voltage element 15 and current detection means 14 connected in parallel to the switching section.

Regarding claim 18, the constant voltage element and current detection means are serially connected in parallel to the switching section, and the control section turns off the switching element when a current equal to/higher than a set current is detected by the current detection section, and outputs a switching control signal to the switching element when a zero current is detected by the current detection section.

Regarding claim 19, Kuriyama '760 teach a constant voltage source as a constant voltage power source.

The differences between Kuriyama et al. '760 and the present claims is that a switching circuit which has a plurality of switching elements connected to bridges, and converts an output of the DC power source into a pulse output (Claim 16), a transformer which receives a primary pulsed voltage from the switching circuit, and outputs a secondary pulsed voltage (Claim 16), first and second diode bridges which rectify the secondary pulsed voltage output from the transformer (Claim 16).

Regarding claim 16, Kuriyama et al. '950 teach a DC power source which generates a predetermined voltage; a switching circuit which has a plurality of switching

elements connected to bridges, and converts an output of the DC power source into a pulse output; a transformer which receives a primary pulsed voltage from the switching circuit, and outputs a secondary pulsed voltage; first and second diode bridges which rectify the secondary pulsed voltage output from the transformer. (See Kuriyama '950 Abstract)

The motivation for utilizing the features of Kuriyama '950 is that it allows for providing the desired voltage. (See Abstract)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Kuriyama et al. '760 by utilizing the features of Kuriyama '950 because it allows for providing the desired voltage.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney G. McDonald whose telephone number is 571-272-1340. The examiner can normally be reached on M-Th with every Friday off..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rodney G. McDonald
Primary Examiner
Art Unit 1795

RM
November 5, 2007